In the claims:

Please amend the claims as follows, where underlines stand for additions and strikethroughs stand for deletions.

1. (original) A method for detecting faults, such as inclusions, within a transparent panel which is located in an ambient atmosphere, the method comprising:

directing light from a light source into an interface in contact with the transparent panel, the interface including one or more interface elements having a refractive index higher than the ambient atmosphere, at least some of the light passing through the interface into the transparent panel and propagating within the transparent panel along a path where total internal reflection is realized at surfaces of the transparent panel; and

observing the light scattered by the faults and exiting the panel.

2. (original) A method according to claim 1 in which the one or more interface elements include a body of flexible material which is pressed against the panel, whereby the body is deformed to increase the area of the panel with which it is in contact.

3. (original) A method according to claim 2 in which the body is composed of silicone rubber.

4. (currently amended) A method according to claim 1~~, claim 2 or claim 3~~ in which the interface includes a plurality of the interface elements, each having a refractive index greater than the ambient medium.

5. (currently amended) A method according to ~~any preceding~~ claim 1 in which the interface further includes a liquid coupling layer interposed between the panel and the one or more interface elements.

6. (original) A method according to claim 5 in which the liquid coupling layer is substantially composed of water.

7. (currently amended) A method according to ~~any preceding~~ claim 1 in which the one or more interface elements include at least one interface element including a portion which has a generally prism-shaped cross-section when viewed in a direction perpendicular to the light path.

8. (currently amended) A method according to ~~any preceding~~ claim 1 in which the interface and light source are moved over the panel to vary the portion of the panel which is illuminated by the light.

9. (original) A method according to claim 8 in which the interface includes at least one interface element which rolls over the surface of the panel when the interface is moved.

10. (original) A method according to claim 9 in which the interface which rolls has circular cross-section when viewed in a direction perpendicular to the light path.

11. (original) A method according to claim 9 in which the interface element which rolls is maintained in a configuration which is elongate in the direction in which it rolls, the configuration including a substantially flat portion facing the panel, the light source providing the light along the length of the substantially flat portion.

12. (currently amended) A method according to claim 10 ~~or claim 11~~ in which the light source moves in fixed positional relationship with the interface element having a circular cross-section.

13. (currently amended) A method according to ~~any preceding~~ claim 1 in which the interface includes at least one interface element which is a flexible wave guide .

14. (currently amended) A method according to ~~any preceding~~ claim 1 in which at least a portion of the surface of the interface, other than the portions through which the light beam enters the interface and the portion of the interface which contacts the panel, has a coating for reflecting light.

15. (currently amended) A method according to ~~any preceding~~ claim 1 in which the ambient medium is air.

16. (currently amended) A method according to ~~any of preceding~~ claim 1 in which the scattered light is observed by a human operator.

17. (currently amended) A method according to ~~any of~~ claims 1 ~~to 15~~ in which the scattered light is observed by one of more electronic detectors or cameras.

18. (original) A method according to claim 17 in which the one or more electronic detectors or cameras are electronically coupled to an automated image analysis system.

19. (original) A method according to claim 18 in which the automated image analysis system determines from the output of the one or more detectors or cameras the type of fault which scattered the light.

20. (original) A method according to claim 19 in which the automated image analysis system discriminates the defects, air bubbles and solid inclusions etc based on their size, shape and reflectivity.

21. (currently amended) A method according to ~~any of~~ claims 17 ~~to 20~~ in which there are a plurality of the cameras and a corresponding plurality of the light sources, the cameras being arranged to observe the illuminated region of the panel from different directions.

22. (currently amended) A method according to claim 21 ~~when dependent on any of claims 18 to 20,~~ in which the one or more electronic detectors or cameras are electronically coupled to an automated image analysis system, and in which the automated image analysis system determines the position of a detected inclusion in the thickness direction of the panel.

23. (currently amended) A method according to ~~any preceding~~ claim 1 in which the transparent panel is glass.

24. (currently amended) A method according to ~~any of~~ claims 1 ~~to 22~~ in which the transparent panel is a transparent polymer.

25. (original) An apparatus for detecting faults, such as inclusions, within a transparent panel which is located in an ambient atmosphere, the apparatus comprising:

a light source;

an interface including one or more interface elements having a refractive index higher than the ambient atmosphere and transparent to light generated by the light source;

light source support means for locating the light source in a positional relationship to the interface such that when the interface is contacting the panel, light generated by the light source is transmitted through the interface into the panel and propagates within the panel along a path where total internal reflection is realized at surfaces of the panel; and

a detector for detecting light scattered by the faults and exiting the panel.

26. (original) An apparatus according to claim 25 in which the one or more interface elements include a body of flexible material, whereby upon pressing the body against the panel the body is deformed to conform to the surface of the panel.

27. (original) An apparatus according to claim 26 in which the body is composed of silicone rubber.

28. (currently amended) An apparatus according to claim 25~~, claim 26 or claim 27~~ in which the interface includes a plurality of the interface elements, each having a refractive index greater than the ambient medium.

29. (currently amended) An apparatus according to ~~any of~~ claims 25 ~~to 28~~ further including means for providing the interface with a liquid coupling layer interposed between the panel and the one or more interface elements.

30. (currently amended) An apparatus according to ~~any of~~ claims 25 ~~to 29~~ in which the one or more interface elements include at least one interface element including a portion which has a generally prism-shaped cross-section when viewed in a direction perpendicular to the path of light generated by the light source.

31. (currently amended) An apparatus according to ~~any of~~ claims 25 ~~to 30~~ in which the interface is adapted to be moved over the panel to vary the portion of the panel which is illuminated by the light.

32. (original) An apparatus according to claim 31 in which the interface includes at least one interface element adapted to roll over the surface of the panel when the interface is moved.

33. (original) An apparatus according to claim 32 in which the interface element adapted to roll has a circular cross-section.

34. (original) An apparatus according to claim 32 further including means for maintaining the interface element which is adapted to roll in a configuration which is elongate in the direction in which it rolls and which includes a substantially flat portion, the light source being arranged to provide the light along the substantially flat portion.

35. (currently amended) A method according to ~~any of~~ claims 31 ~~to 34~~ in which the light source support means is arranged, as the interface moves over the surface of the panel, to move the light source maintaining fixed positional relationship with the interface.

36. (currently amended) An apparatus according to ~~any of~~ claims 25 ~~to 35~~ in which the interface includes at least one interface element which is a flexible wave guide sheet.

37. (currently amended) An apparatus according to ~~any of~~ claims 25 ~~to 36~~ in which at least a portion of the surface of the interface, other than the portions through which the light beam enters the interface and the portion of the interface which contacts the panel, has a coating for reflecting light.

38. (currently amended) An apparatus according to ~~any of~~ claims 25 ~~to 37~~ further including one of more electronic detectors for detecting the scattered light.

39. (original) An apparatus according to claim 38 further including an automated image analysis system arranged to receive data output by the one or more electronic detectors.

40. (original) An apparatus according to claim 39 in which the automated image analysis system is arranged to determine from the output of the one or more detectors the type of fault which scattered the light.

41. (original) An apparatus according to claim 40 in which the automated image analysis system is arranged to discriminate air bubbles from solid inclusions based on their size, shape and/or reflectivity.

42. (currently amended) An apparatus according to ~~any of~~ claims 38 ~~to 41~~ in which there are a plurality of the cameras and a corresponding plurality of the light sources, the cameras being arranged to observe the illuminated region of the panel from different directions.

43. (currently amended) An apparatus according to claim 42 ~~when dependent on claim 39, claim 40 or claim 41~~ <u>further including an automated image analysis system arranged to receive data output by the one or more electronic detectors, and</u> in which the automated image analysis system is arranged to determine the position of a detected inclusion in the thickness direction of the panel.